

In the Claims:

Please amend the claims as follows.

1       --1(Currently amended).     A connector for coupling microwave signals from a  
2   microwave module to a signal line placed on a support structure comprising:

3            a signal conductor extending from said microwave module into said support structure and  
4   coupled to said signal line to carry microwave signals from said microwave module to said signal  
5   line;

6            an electrically conductive gasket placed about said signal conductor between said  
7   microwave module and said support structure to reduce signal leakage and form a ground path  
8   therebetween; and

9            an insulating sleeve placed about said signal conductor within said support structure to  
10   control impedance variation of a microwave signal path with respect to varying positions of said  
11   signal conductor and sleeve within that structure, wherein a clearance is formed between a sleeve  
12   exterior surface and a support structure internal surface to facilitate said varying positions.

1       2(Original).   The connector of claim 1, wherein said microwave module and said  
2   support structure are arranged in a vertical fashion with said signal conductor extending in a  
3   substantially vertical direction therebetween.

1       3(Original).   The connector of claim 1, wherein said signal conductor includes a pin.

1       4(Original).   The connector of claim 1, wherein said support structure includes a chassis

2 plate.

1 5(Original). The connector of claim 1, wherein said gasket is constructed of a pliable  
2 metal.

1 6(Currently amended). The connector of claim 1, wherein said signal conductor is  
2 placed within a channel defined within said support structure and said dimensions of said signal  
3 conductor and said insulating sleeve provide said [[a]] clearance relative to said channel that  
4 maintains said microwave signal path impedance substantially independent of the position of said  
5 insulating sleeve and signal conductor within said channel.

1 7(Original). The connector of claim 6, wherein said clearance is approximately 0.005  
2 inches.

1 8(Original). The connector of claim 1, wherein said signal line includes a microstrip  
2 transmission line.

1 9(Original). The connector of claim 1, wherein said signal conductor is coupled to said  
2 signal line via a conductive element and said signal line includes at least one capacitive element  
3 to compensate for inductance of said conductive element coupling.

1 10(Original). The connector of claim 1, wherein said microwave module includes a  
2 module signal line coupled to said signal conductor to provide microwave signals.

1        11(Original). The connector of claim 10, wherein said module signal line is positioned  
2 substantially perpendicular to said signal conductor.

1        12(Original). The connector of claim 10, wherein said module signal line is positioned  
2 substantially parallel to said signal conductor.

1        13(Currently amended). ~~The connector of claim 10, wherein A connector for~~  
2 coupling microwave signals from a microwave module to a signal line placed on a support  
3 structure comprising:

4        a signal conductor extending from said microwave module into said support structure and  
5 coupled to said signal line to carry microwave signals from said microwave module to said signal  
6 line;

7        an electrically conductive gasket placed about said signal conductor between said  
8 microwave module and said support structure to reduce signal leakage and form a ground path  
9 therebetween; and

10        an insulating sleeve placed about said signal conductor within said support structure to  
11 control impedance of a microwave signal path within that structure;

12        wherein said microwave module includes a module signal line coupled to said signal  
13 conductor to provide microwave signals and said module signal line includes a microstrip  
14 transmission line.

1        14(Original). The connector of claim 10, wherein said signal conductor is coupled to said  
2 module signal line via a conductive element and said module signal line includes at least one

3 capacitive element to compensate for inductance of said conductive element coupling.

1 15(Currently amended). ~~The connector of claim 1, A connector for coupling~~  
2 ~~microwave signals from a microwave module to a signal line placed on a support structure~~  
3 ~~comprising:~~

4 a signal conductor extending from said microwave module into said support structure and  
5 coupled to said signal line to carry microwave signals from said microwave module to said signal  
6 line;

7 an electrically conductive gasket placed about said signal conductor between said  
8 microwave module and said support structure to reduce signal leakage and form a ground path  
9 therebetween; and

10 an insulating sleeve placed about said signal conductor within said support structure to  
11 control impedance of a microwave signal path within that structure;

12 wherein said microwave module includes a seal placed about said signal conductor to  
13 maintain signals within said microwave module.

1 16(Currently amended). A method of coupling microwave signals from a microwave  
2 module to a signal line placed on a support structure comprising:

3 (a) transporting microwave signals from said microwave module to said support  
4 structure via a signal conductor extending from said microwave module into said support  
5 structure and coupled to said signal line;

6 (b) forming a ground path and reducing signal leakage between said microwave  
7 module and said support structure via an electrically conductive gasket placed about said signal

8 conductor; and

9 (c) controlling impedance variation of a microwave signal path with respect to  
10 varying positions of said signal conductor within said support structure via an insulating sleeve  
11 placed about said signal conductor within that structure with a clearance gap formed between a  
12 sleeve exterior surface and a support structure internal surface to facilitate said varying positions.

1 17(Original). The method of claim 16, wherein step (a) further includes:

2 (a.1) transporting microwave signals from said microwave module to said support  
3 structure, wherein said microwave module and said support structure are arranged in a vertical  
4 fashion with said signal conductor extending in a substantially vertical direction therebetween.

1 18(Original). The method of claim 16, wherein said signal conductor includes a pin.

1 19(Original). The method of claim 16, wherein said support structure includes a chassis  
2 plate.

1 20(Original). The method of claim 16, wherein said gasket is constructed of a pliable  
2 metal.

1 21(Currently amended). The method of claim 16, wherein said signal conductor is  
2 placed within a channel defined within said support structure, and step (c) further includes:  
3 (c.1) maintaining said microwave signal path impedance substantially independent of  
4 the position of said insulating sleeve and signal conductor within said channel via [[a]] said

5 clearance gap formed between said signal conductor with said insulating sleeve and said channel.

1 22(Original). The method of claim 21, wherein said clearance gap is approximately  
2 0.005 inches.

1 23(Original). The method of claim 16, wherein said signal line includes a microstrip  
2 transmission line.

1 24(Original). The method of claim 16, wherein step (a) further includes:  
2 (a.1) coupling said signal conductor to said signal line via a conductive element,  
3 wherein said signal line includes at least one capacitive element to compensate for inductance of  
4 said conductive element coupling.

1 25(Original). The method of claim 16, wherein step (a) further includes:  
2 (a.1) transferring microwave signals to said signal conductor from a module signal line  
3 within said microwave module and coupled to said signal conductor.

1 26(Original). The method of claim 25, wherein step (a.1) further includes:  
2 (a.1.1) transferring microwave signals to said signal conductor from said module signal  
3 line placed substantially perpendicular to said signal conductor.

1 27(Original). The method of claim 25, wherein step (a.1) further includes:  
2 (a.1.1) transferring microwave signals to said signal conductor from said module signal

3 line placed substantially parallel to said signal conductor.

1 28(Currently amended). ~~The method of claim 25, A method of coupling microwave~~  
2 ~~signals from a microwave module to a signal line placed on a support structure comprising:~~

3 ~~(a) transporting microwave signals from said microwave module to said support~~  
4 ~~structure via a signal conductor extending from said microwave module into said support~~  
5 ~~structure and coupled to said signal line, wherein step (a) further includes:~~

6 ~~(a.1) transferring microwave signals to said signal conductor from a module~~  
7 ~~signal line within said microwave module and coupled to said signal conductor, wherein said~~  
8 ~~module signal line includes a microstrip transmission line;~~

9 ~~(b) forming a ground path and reducing signal leakage between said microwave~~  
10 ~~module and said support structure via an electrically conductive gasket placed about said signal~~  
11 ~~conductor; and~~

12 ~~(c) controlling impedance of a microwave signal path within said support structure~~  
13 ~~via an insulating sleeve placed about said signal conductor within that structure.~~

1 29(Original). The method of claim 25, wherein step (a.1) further includes:

2 (a.1.1) coupling said signal conductor to said module signal line via a conductive element,  
3 wherein said signal line includes at least one capacitive element to compensate for inductance of  
4 said conductive element coupling.

1 30(Currently amended). ~~The method of claim 16, A method of coupling microwave~~  
2 ~~signals from a microwave module to a signal line placed on a support structure comprising:~~

3           (a) transporting microwave signals from said microwave module to said support  
4 structure via a signal conductor extending from said microwave module into said support  
5 structure and coupled to said signal line, wherein step (a) further includes:

6           (a.1)   maintaining signals within said microwave module via a seal placed about  
7 said signal conductor;

8           (b)   forming a ground path and reducing signal leakage between said microwave  
9 module and said support structure via an electrically conductive gasket placed about said signal  
10 conductor; and

11           (c)   controlling impedance of a microwave signal path within said support structure  
12 via an insulating sleeve placed about said signal conductor within that structure.--